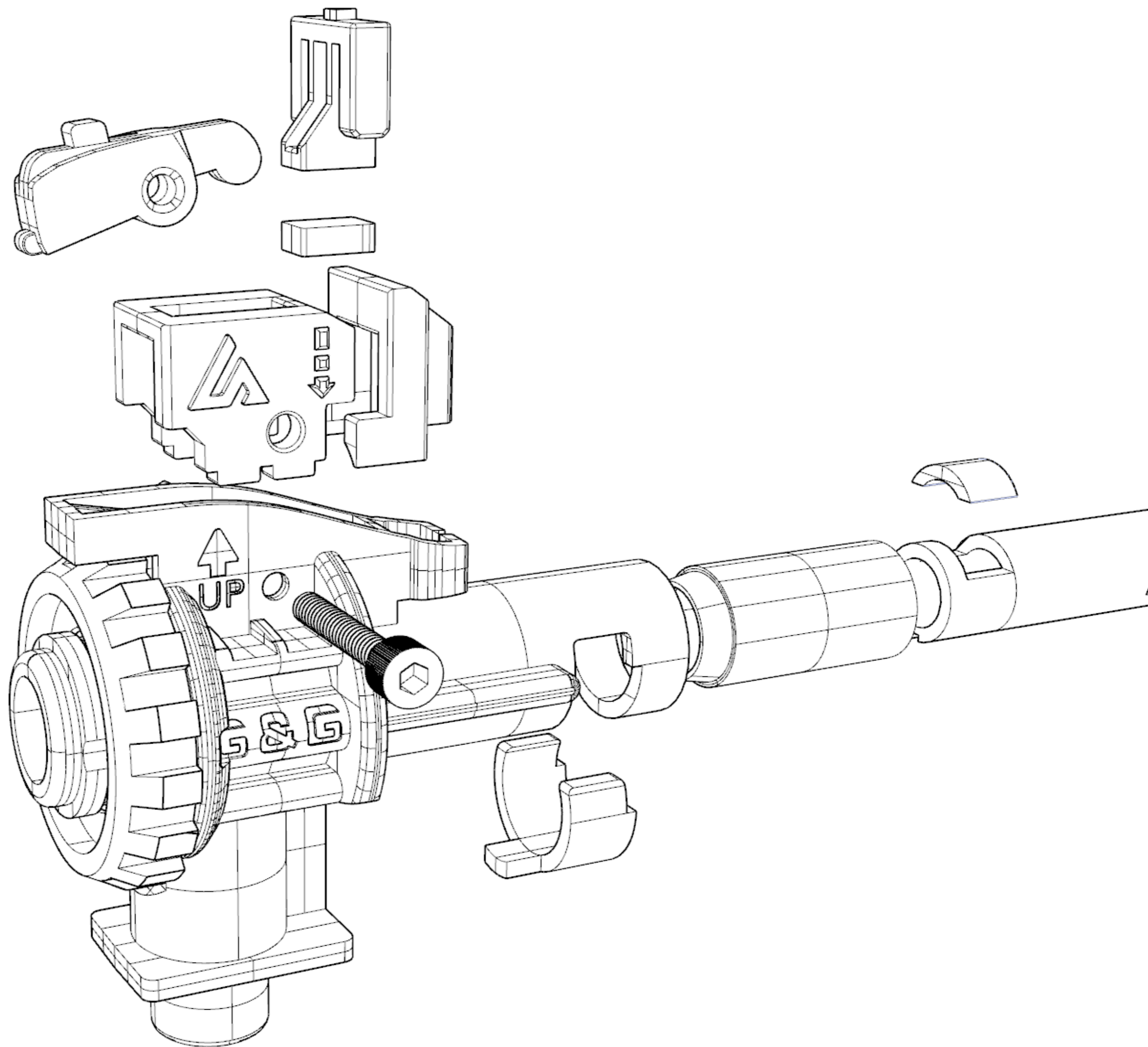


Installation Manual

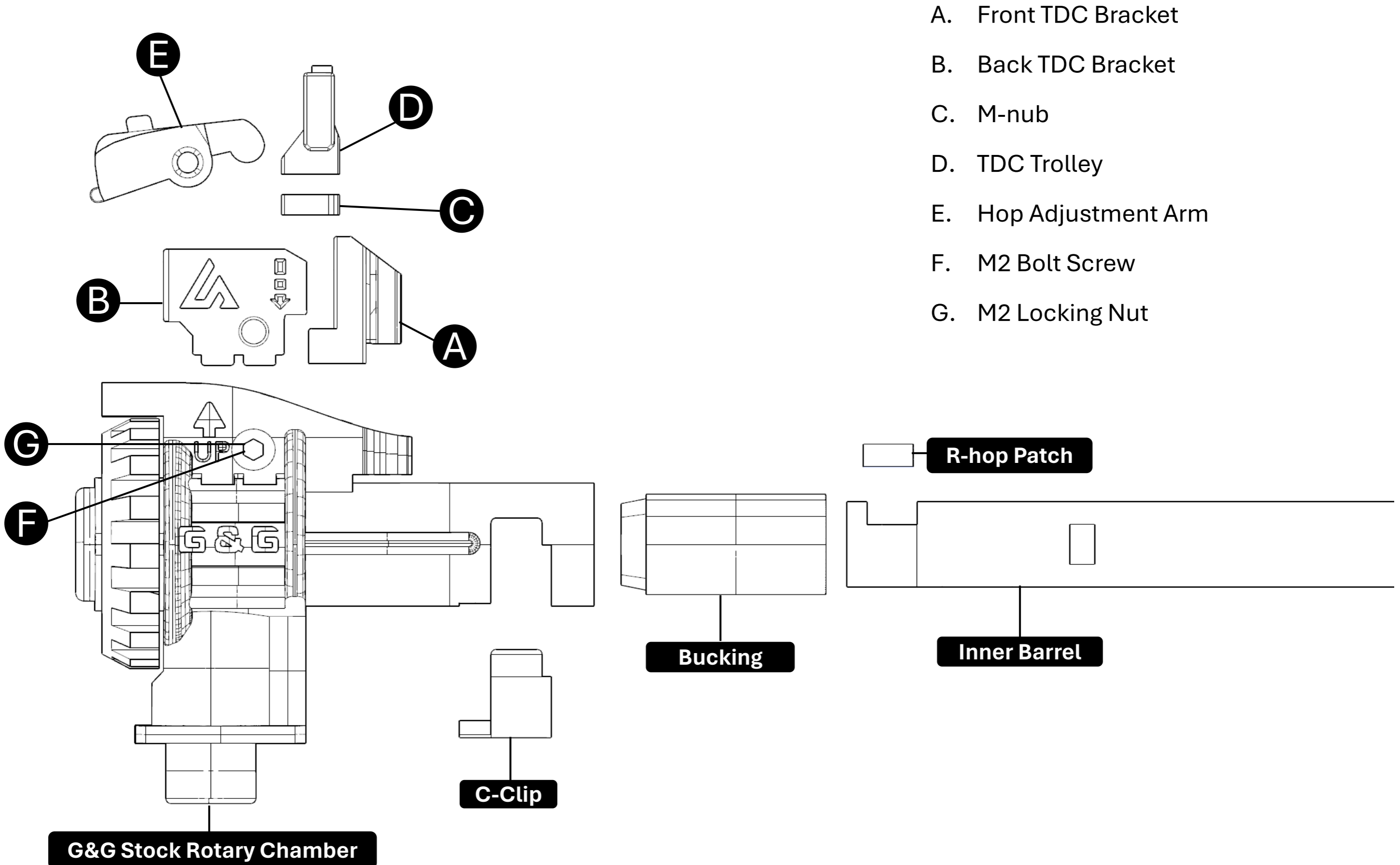
Airtech TDC Rotary Convertor Kit: G&G CM16 (M4)
Rotary Chamber



Preparation

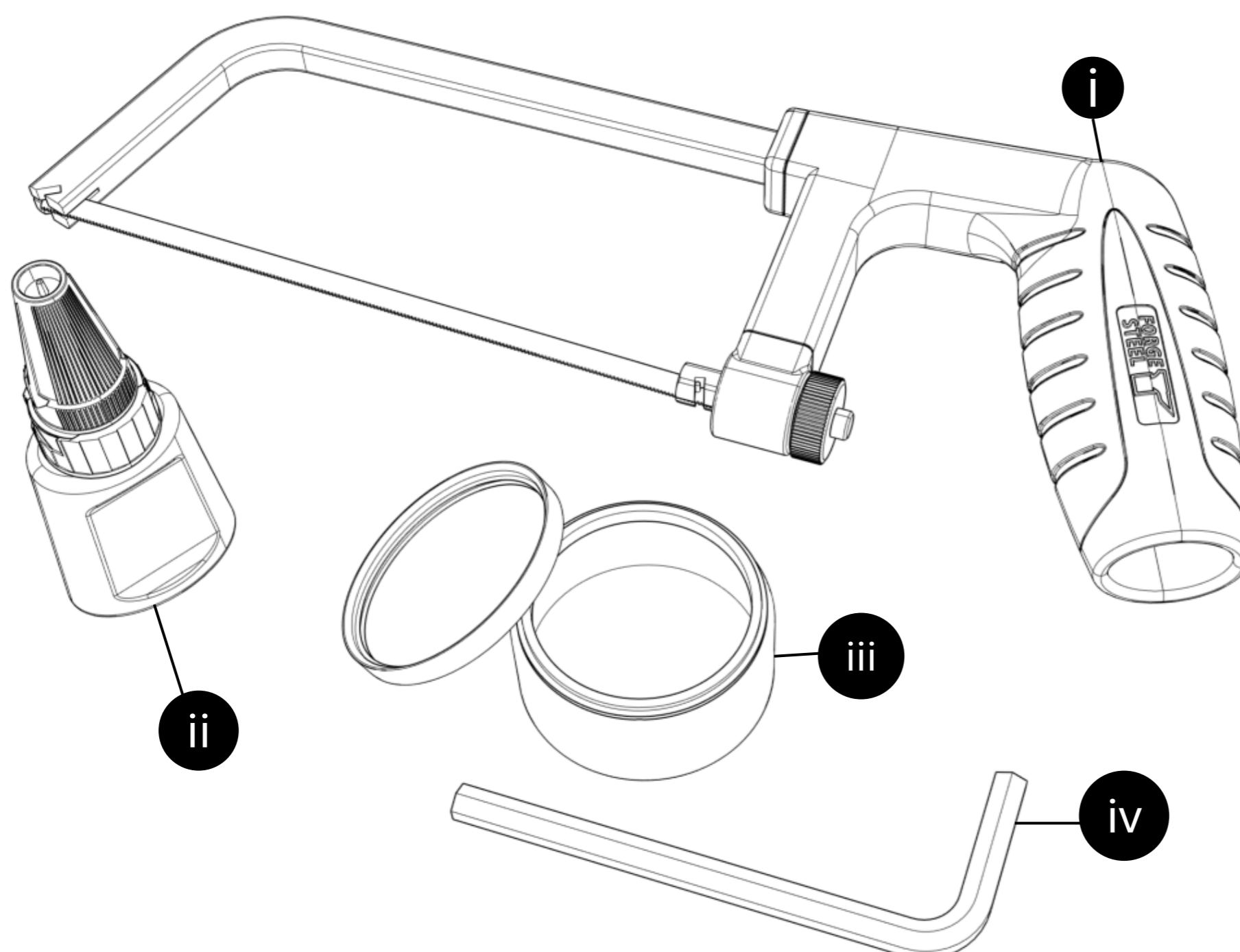
TDC Rotary Convertor Kit: G&G CM16 (m4) Rotary Chamber

What is included?



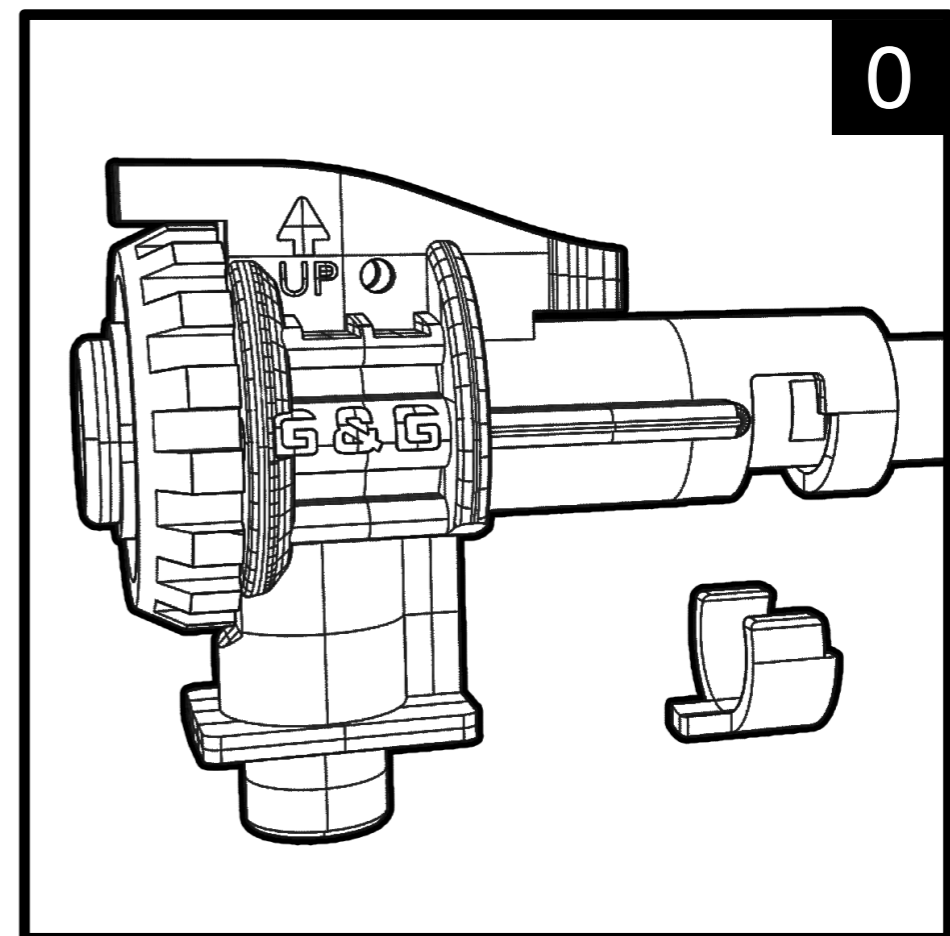
- A. Front TDC Bracket
- B. Back TDC Bracket
- C. M-nub
- D. TDC Trolley
- E. Hop Adjustment Arm
- F. M2 Bolt Screw
- G. M2 Locking Nut

Other tools required for installation



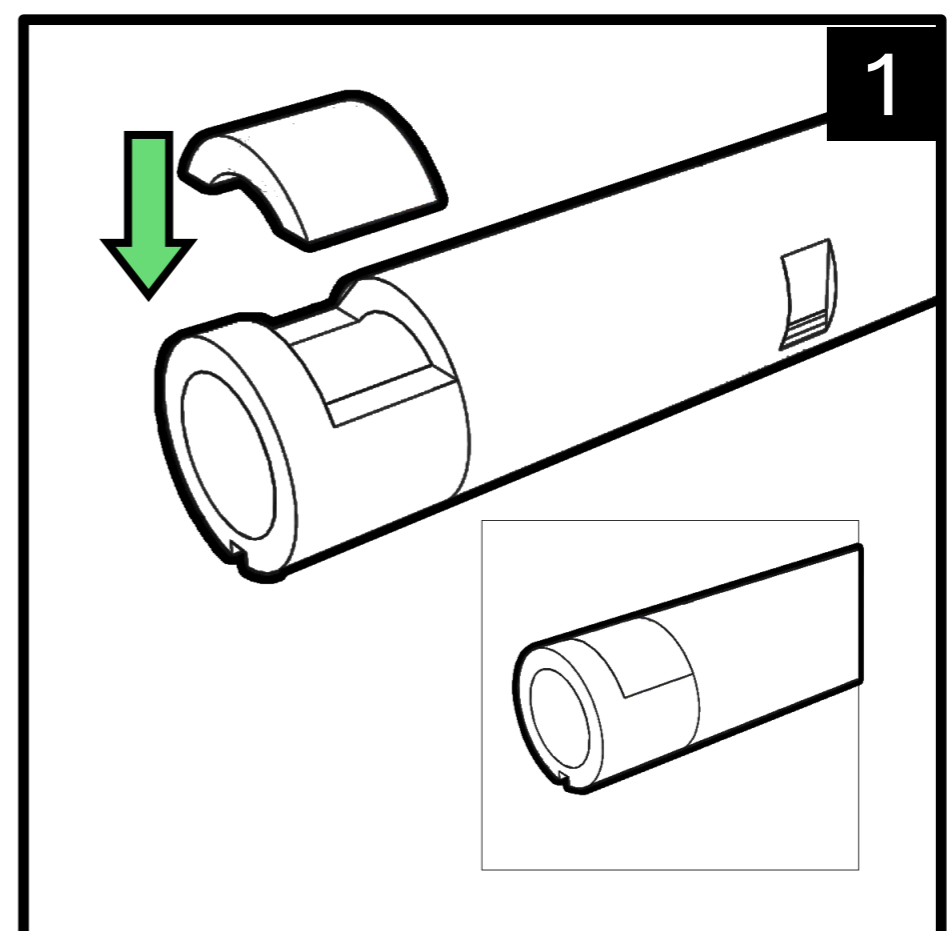
- i. Hacksaw
- ii. Loctite (Super Glue)
- iii. Silicone Grease (Airsoft)
- iv. M2 Allen Key

0. Start by removing the hop-up chamber from the rifle.
Strip down all the components so that it is only the hop up chamber that remains.



1. Install your chosen R-hop patch into the inner barrel – if you have pre-installed R-hop barrel already, you can skip this step. Flat-hop and normal bucking's will also function.

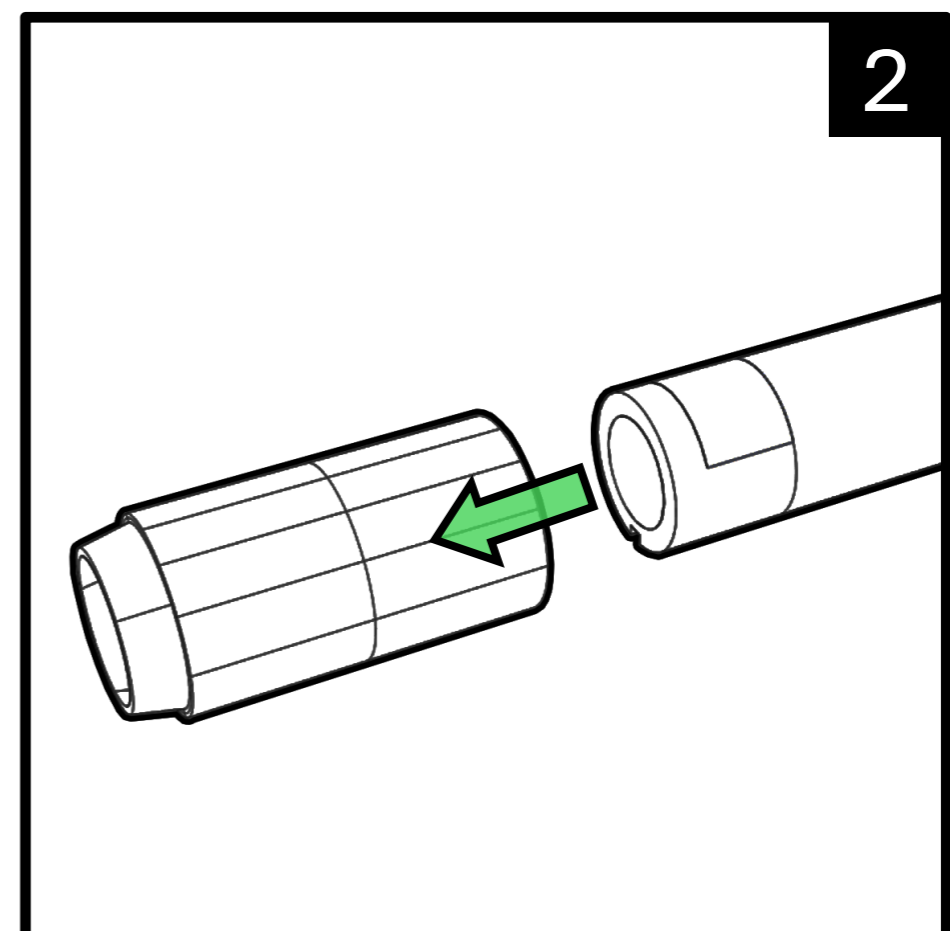
For R-hop patches we recommended brands like Psionic, Elvish and Silent Sniper. Drop-in buckings, including Maple leaf macaroon and Tru-hop can be used too.



2. Insert the inner barrel into the bucking.

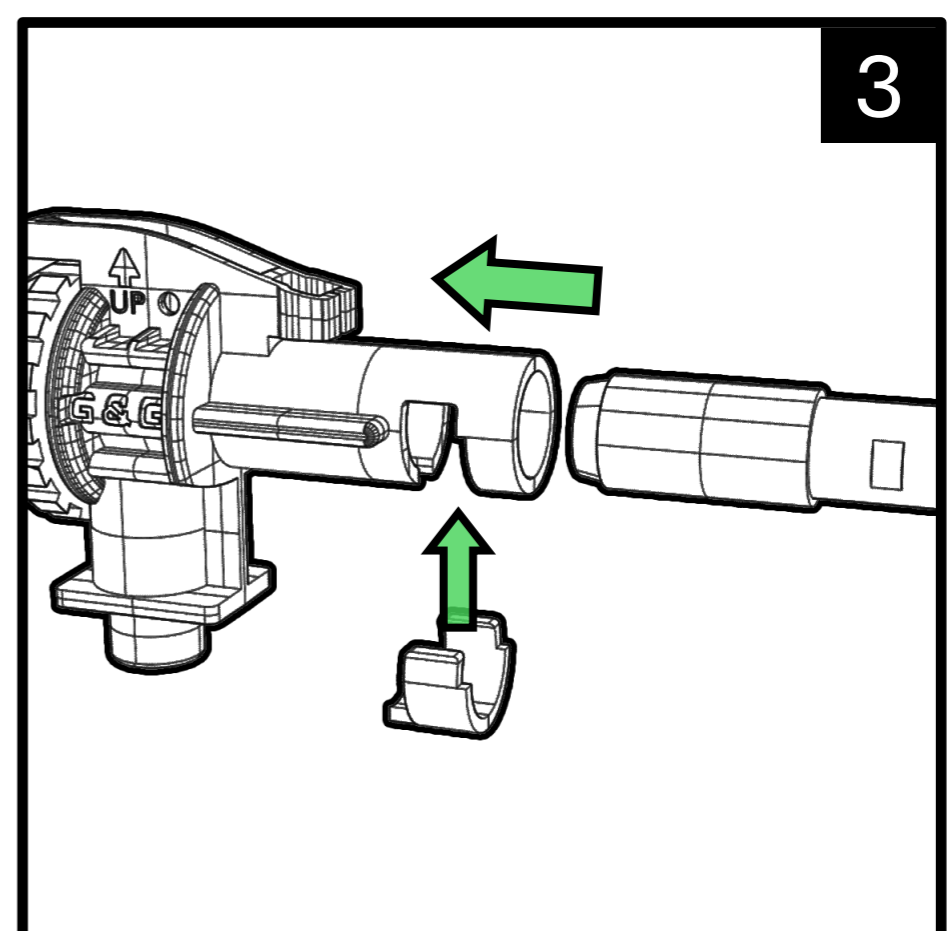
R-HOP Patch: Ensure that it is a mound less bucking type – you can modify yourself from a stock bucking.

R-Hop Buckings: Brands like Maple Leaf Macaroon, Tru-hop or TNT have R-hop already installed. Simply insert the inner barrel into the bucking.

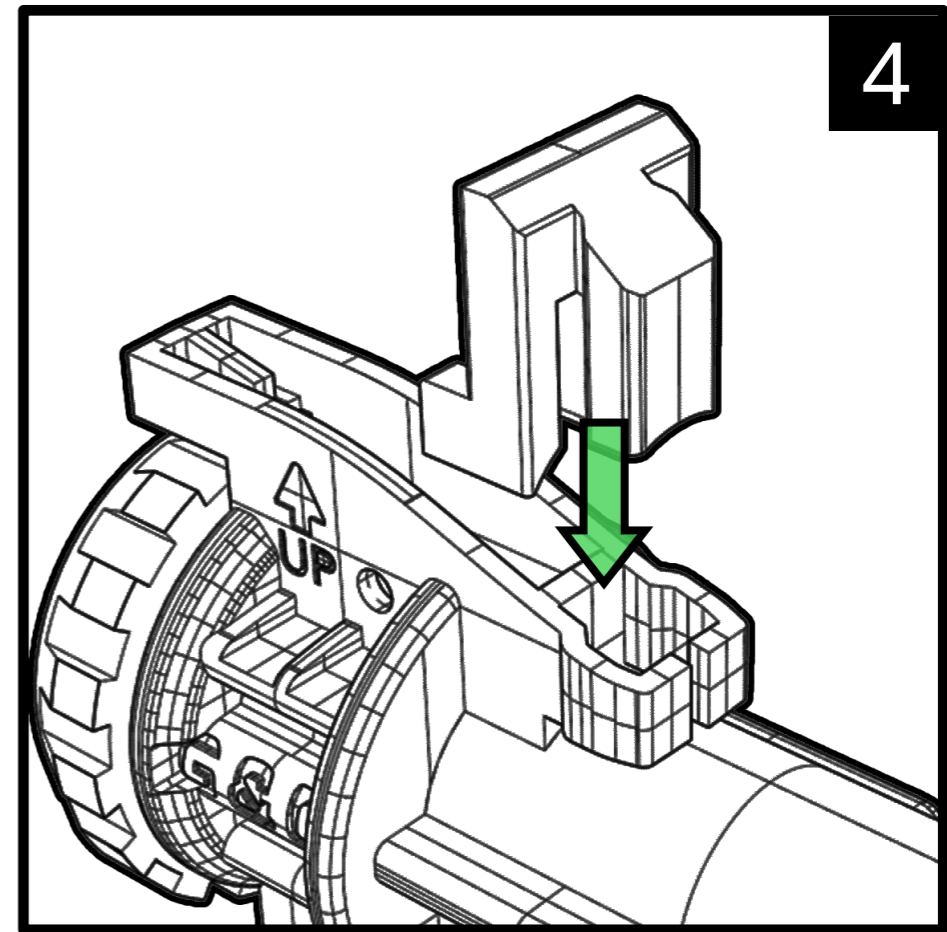


3. First insert the inner barrel/ bucking into the hop-up chamber.

Next Insert C-clip to lock the inner barrel. It also keeps your inner barrel centred correctly.

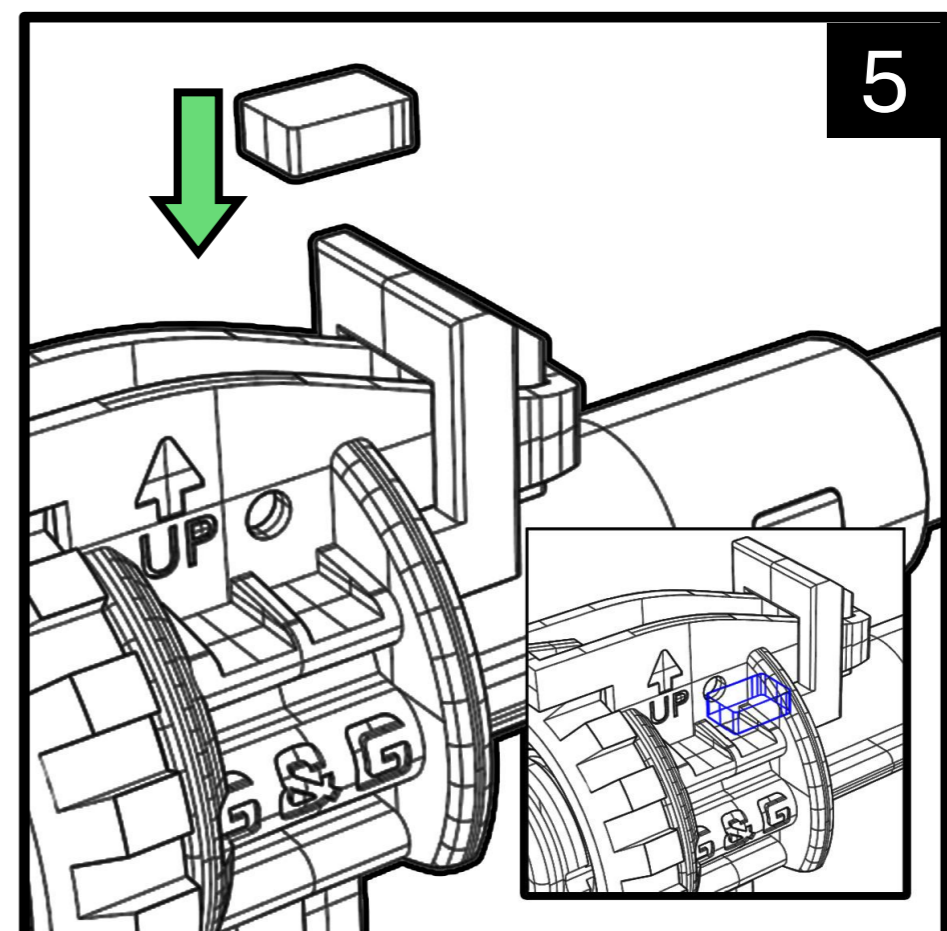


4. Install the front bracket of the TDC kit onto the front of the hop up unit. It will slide in and will get tighter to ensure it is locked properly and for stability



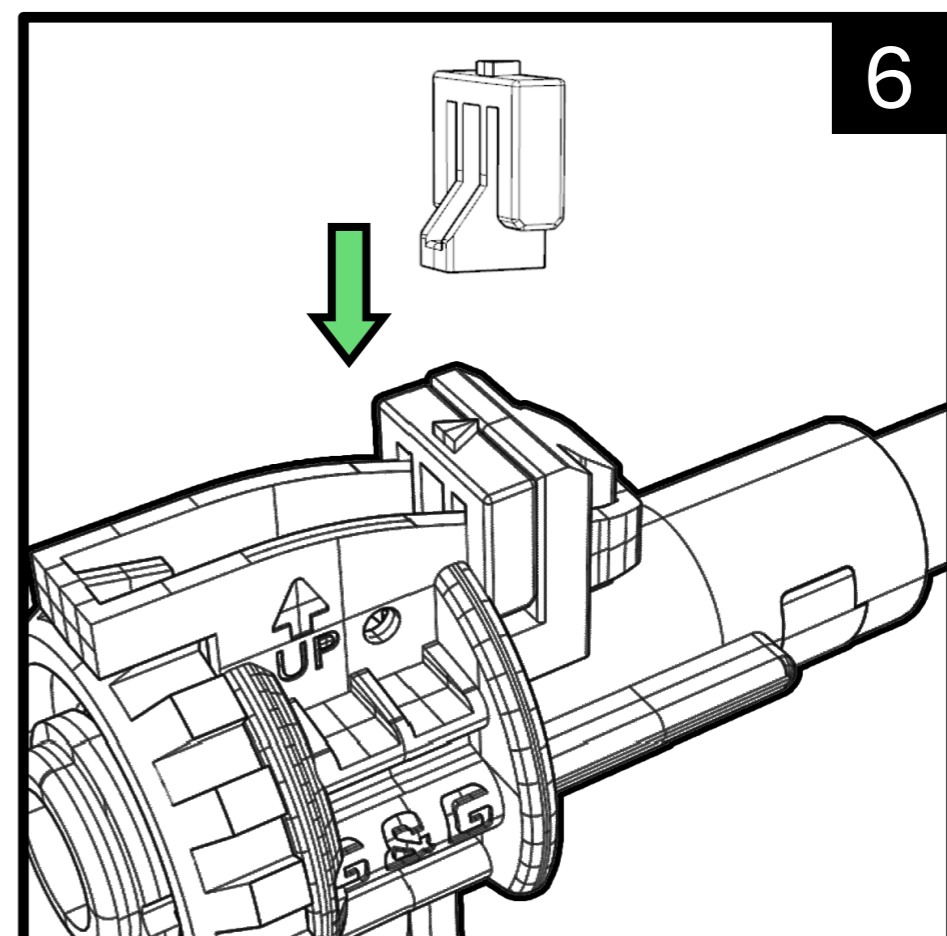
5. Installing the M-nub.

Peel the 3M film from the top of the M-nub and apply some silicone grease on the bottom and place the M-nub into hop up window inside the chamber.



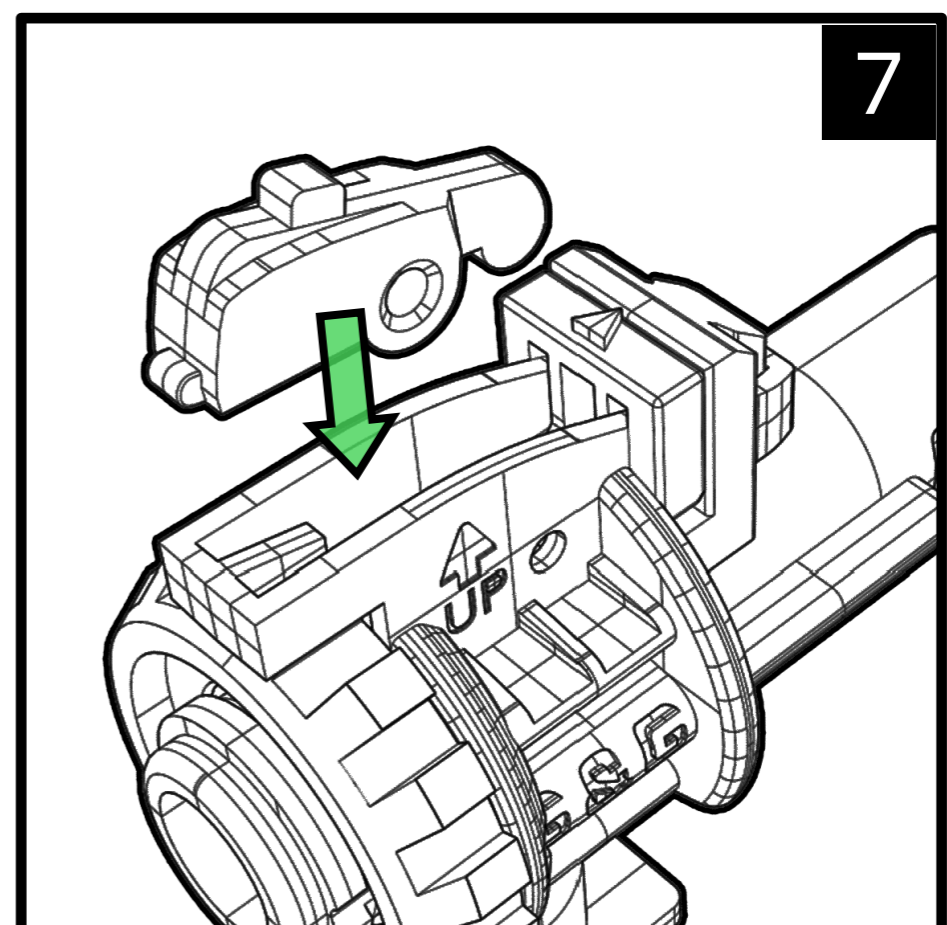
6. Installing the Trolley.

Align the trolley and insert it into the slot behind the front bracket. The foot of the trolley will connect the M-nubs adhesive side. Push the trolley to ensure it can slide up and down easily. If not, apply some silicone grease on the sides for a smoother operation.



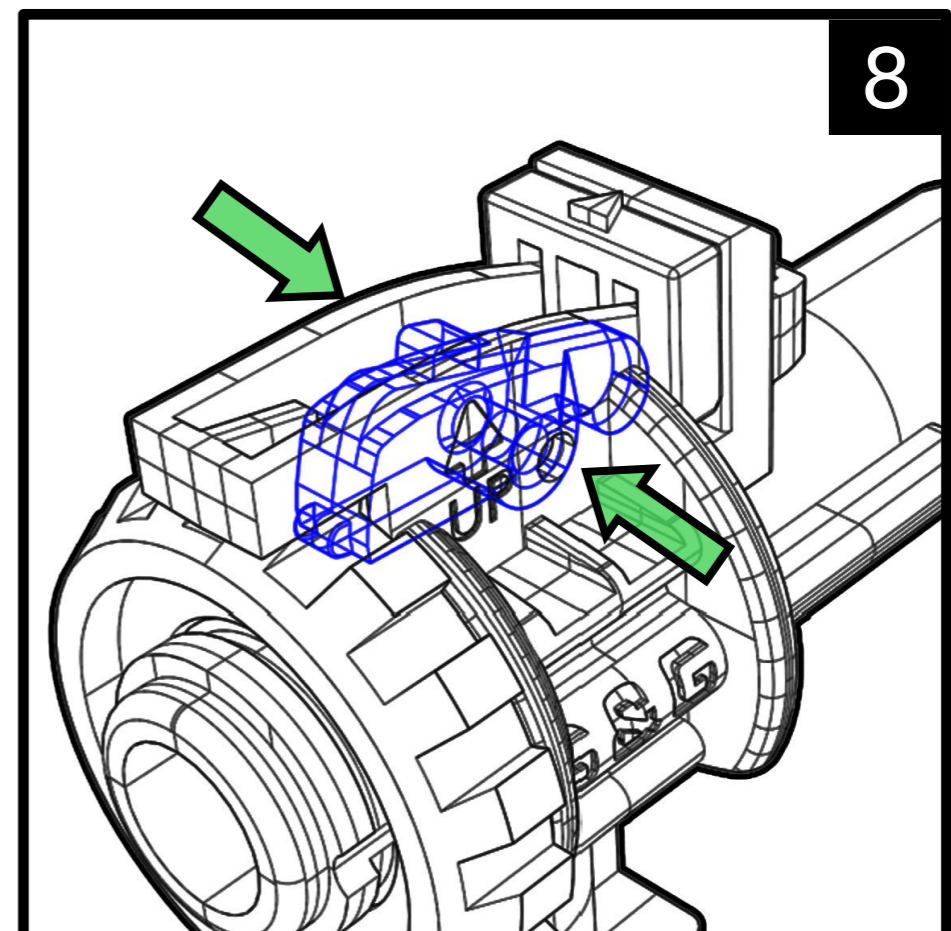
7. Installing the Hop-up Arm.

Align from the top and install nose first into the chamber and in between the middle slit of the trolley. Next ensure the back to the arm slots into hop up wheel. (Remember to dial the wheel into the neutral hop position).



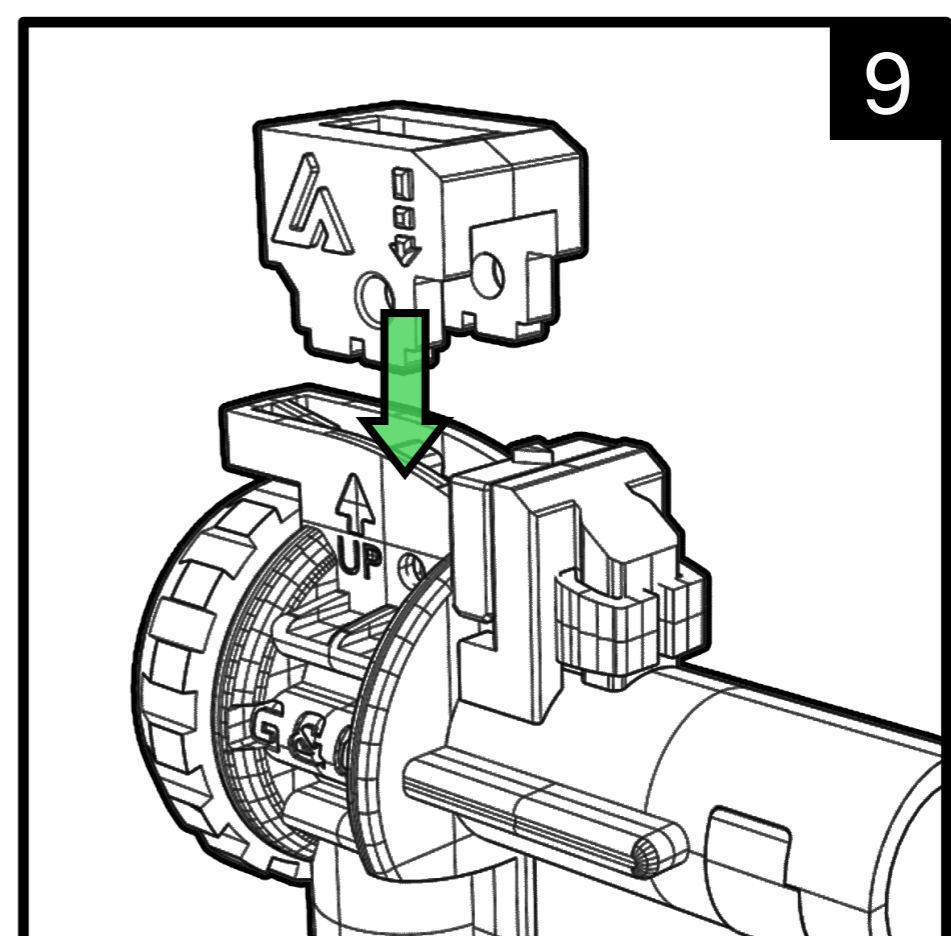
8. Aligning the hop-up arm.

Align the hole at the hop-up arm so that it aligns with the pin holes on the hop-up chamber. You will need this properly aligned to lock the kit in the later steps.



9. Installing the Back Bracket.

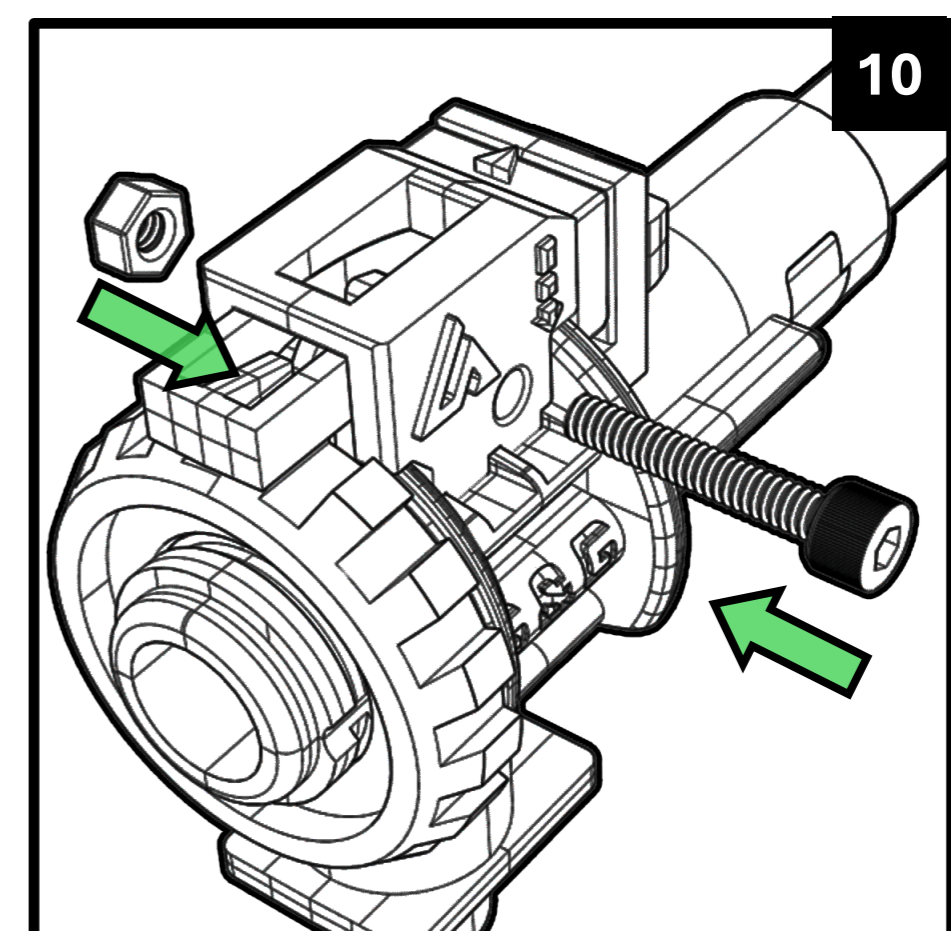
Align the bracket in slot into the hop-up chamber. This combined with the front bracket will lock the trolley into the 'TDC' perfect vertical position.



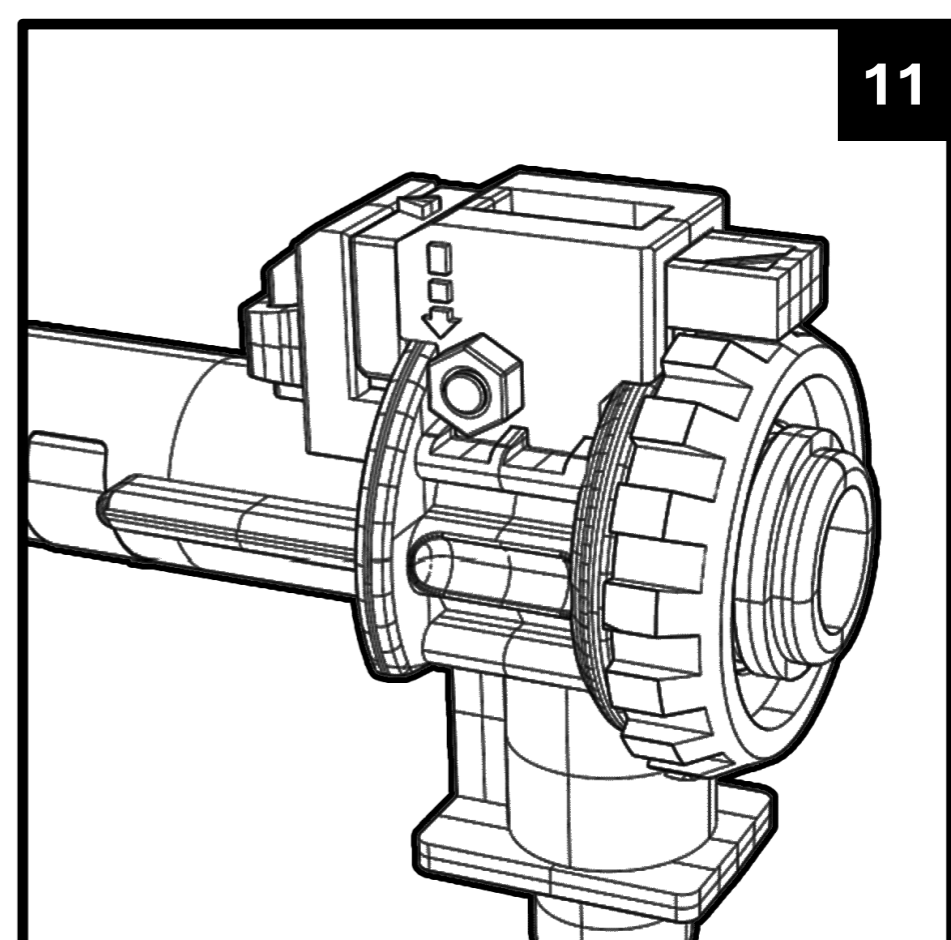
10. Locking the TDC Kit.

Ensure that the pin holes are lined up perfectly between, the Back Bracket, the G&G Rotary chamber and Hop-up arm inside. You can use a small screwdriver or Alen Key inserted and twirled around first to clear the pin slots.

Once ready, insert the M2 screw and lock it with the nut on the other side.



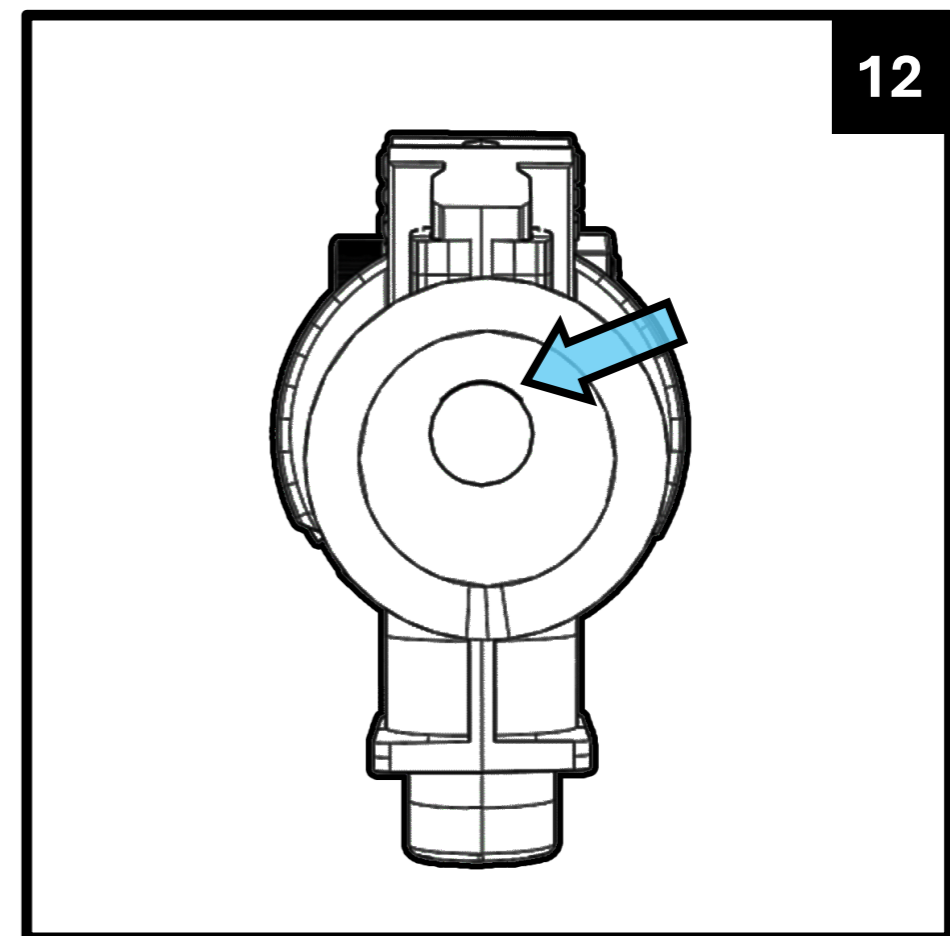
11. Do not over lock the screw and nut. A Firm lock will be sufficient.



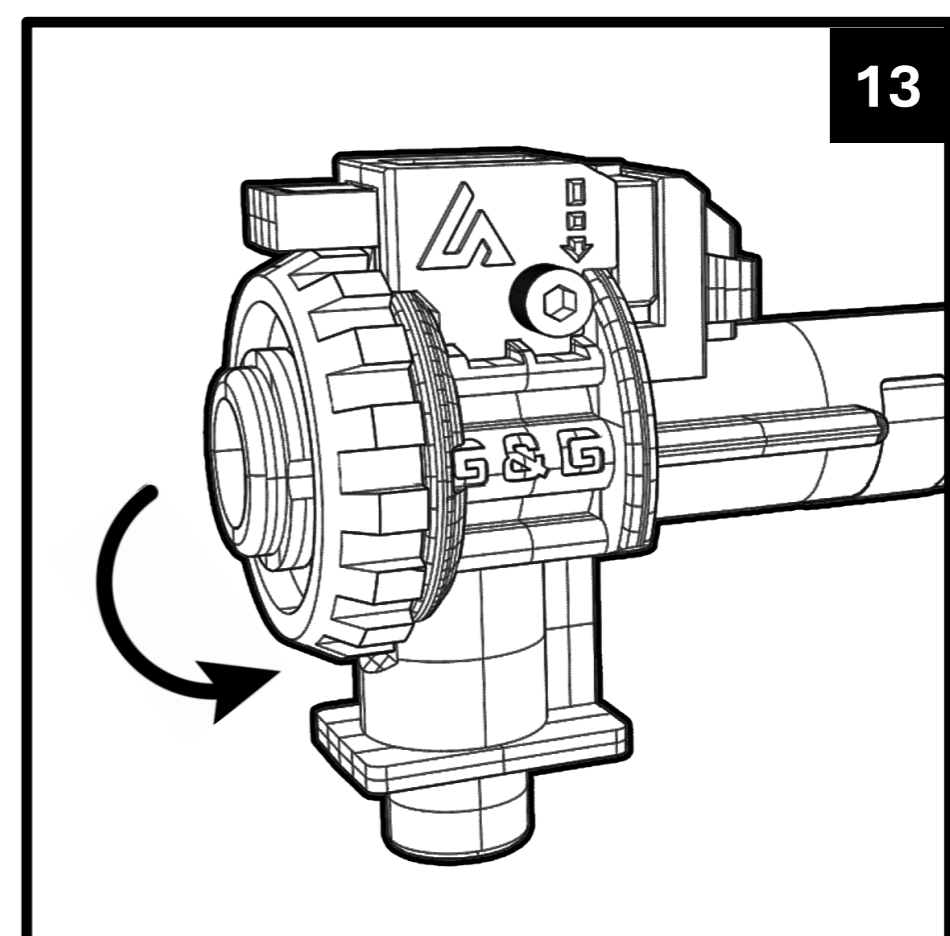
12. Take a look inside the inner barrel from the front.

With the hop-up at zero (neutral) you should be able to see right through.

If you see there is hop protruding downwards, there may be a need to sand down the M-nub until you reach the desired outcome. This will depend on the system of inner barrel vs bucking vs R-hop patch used. See the troubleshooting part of our website for more information or contact us.

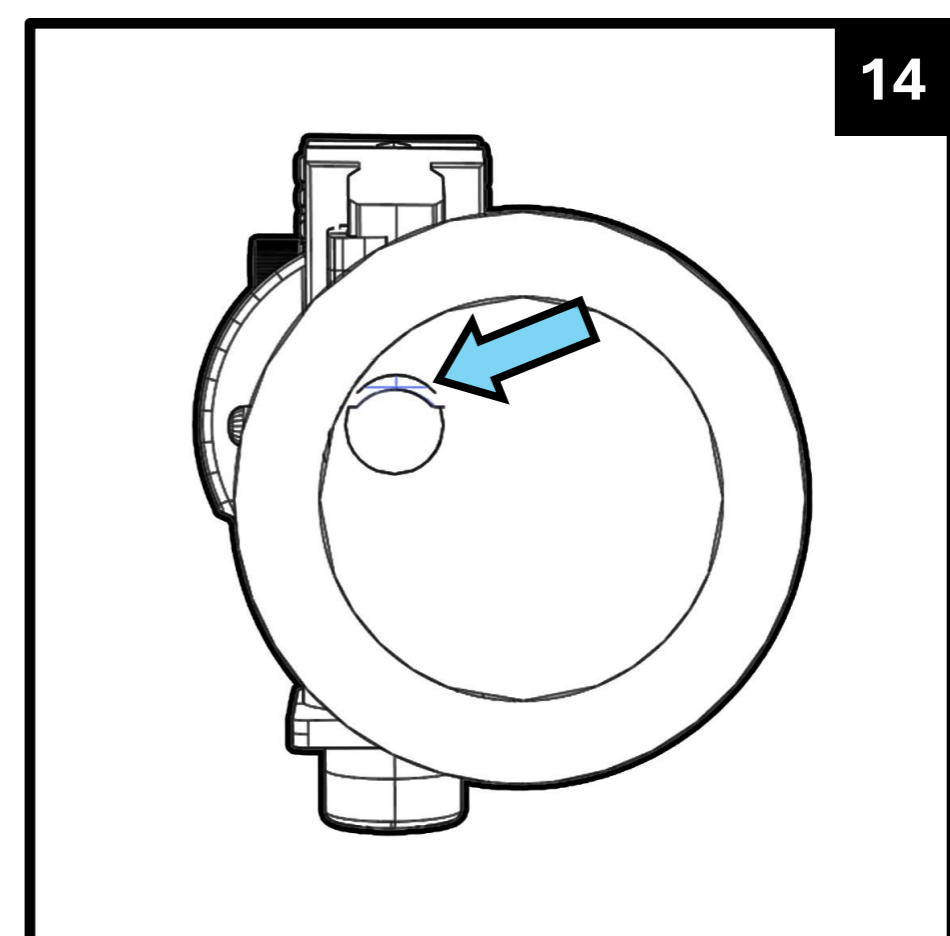


13. Dial the hop-up wheel fully to test that there are hop being applied.

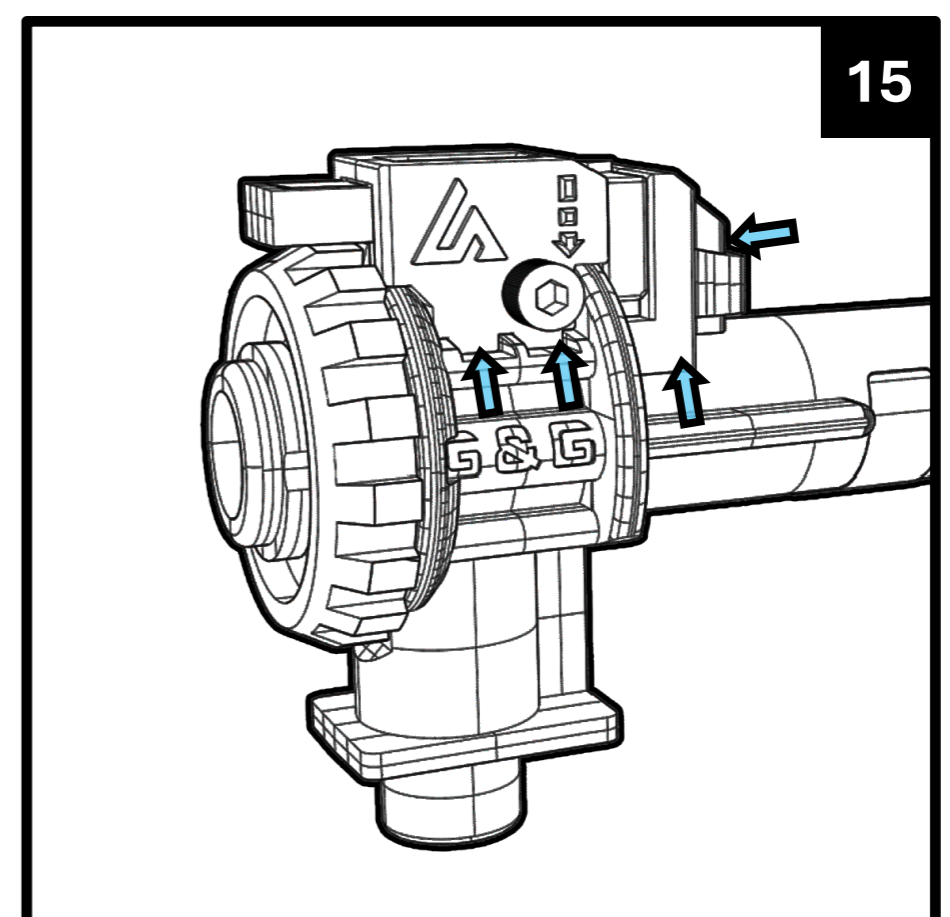


14. Peek into the inner barrel again and you should be able to see the R-Hop patch protruding downwards.

That will be area that will be apply hop on the passing BB. Turn back to zero hop (neutral) after the test.

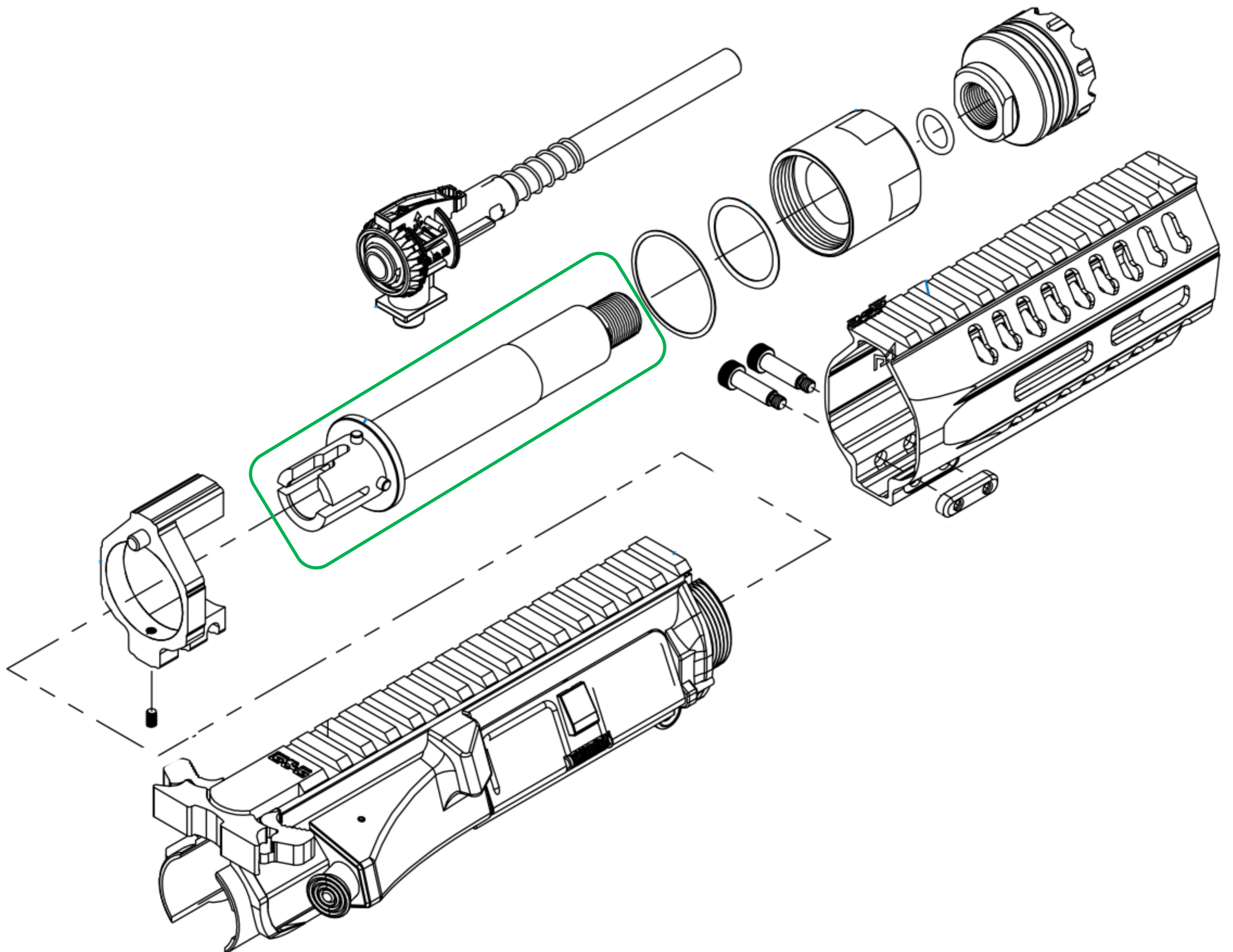


15. Once you are happy with the set up and everything works, you can apply a dab of Loctite glue onto the front and back brackets to ensure it doesn't budge with all the moving around during a game. The blue arrow in figure 15 recommends dabbing the Loctite on these areas for the left and right hand side of the chamber. After leave for 12-24 hours to full cure.



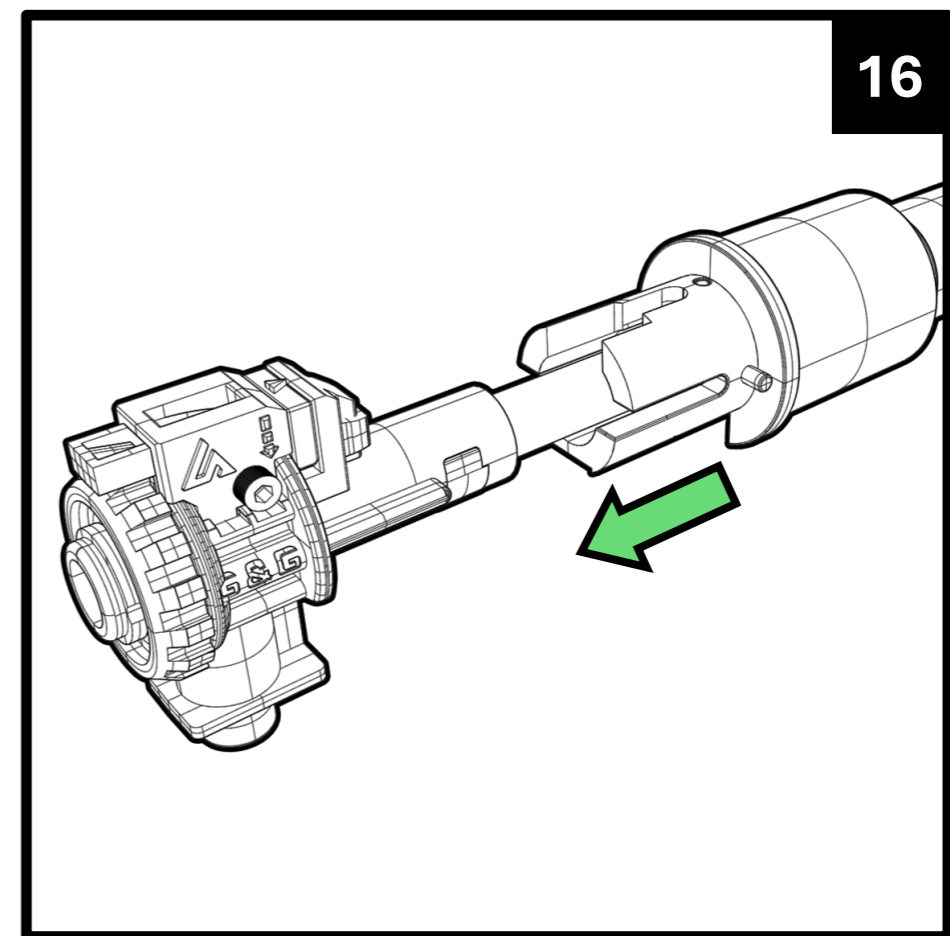
Outer Barrel Modification

TDC Rotary Convertor Kit: G&G CM16 (M4) Rotary Chamber

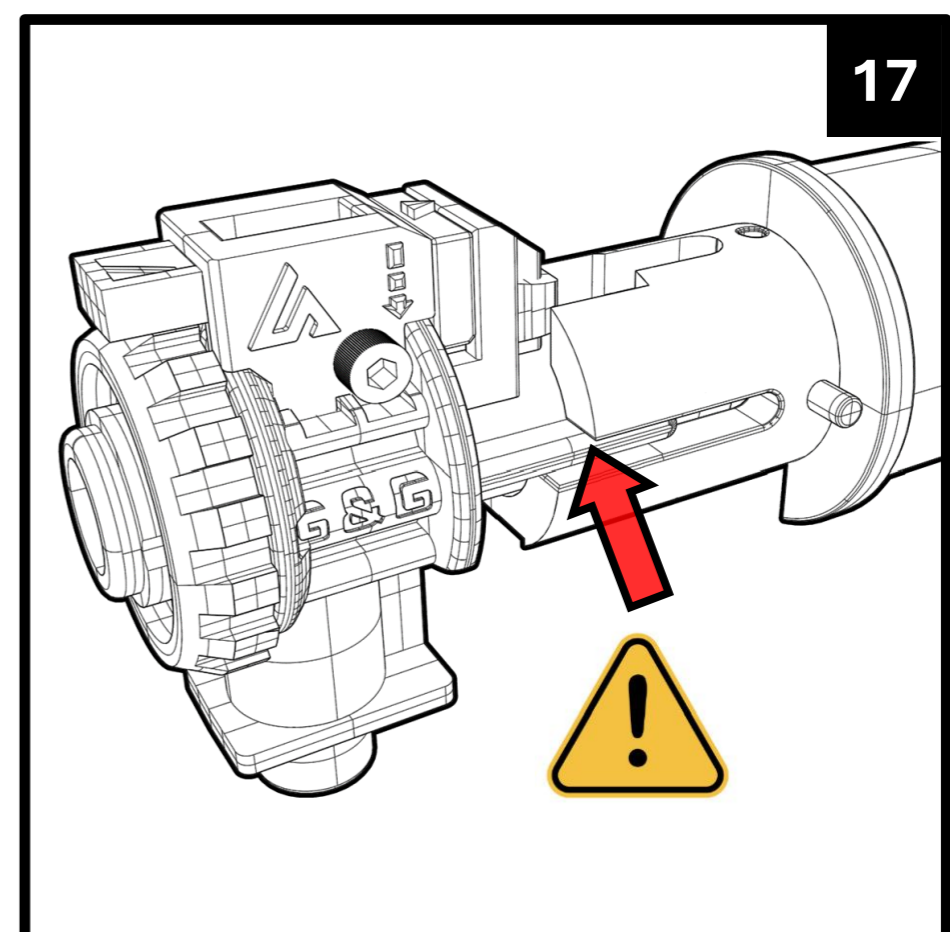


This section covers stage of separating and modifying the outer barrel in order for the TDC convertor to fit. The demonstration above shows a typical G&G CM16 upper receiver and the parts to take out to reach the outer barrel (highlighted in green). Above is the ARP9 model however much of the CM16 models are similar. This will let you extract the outer barrel for the next step.

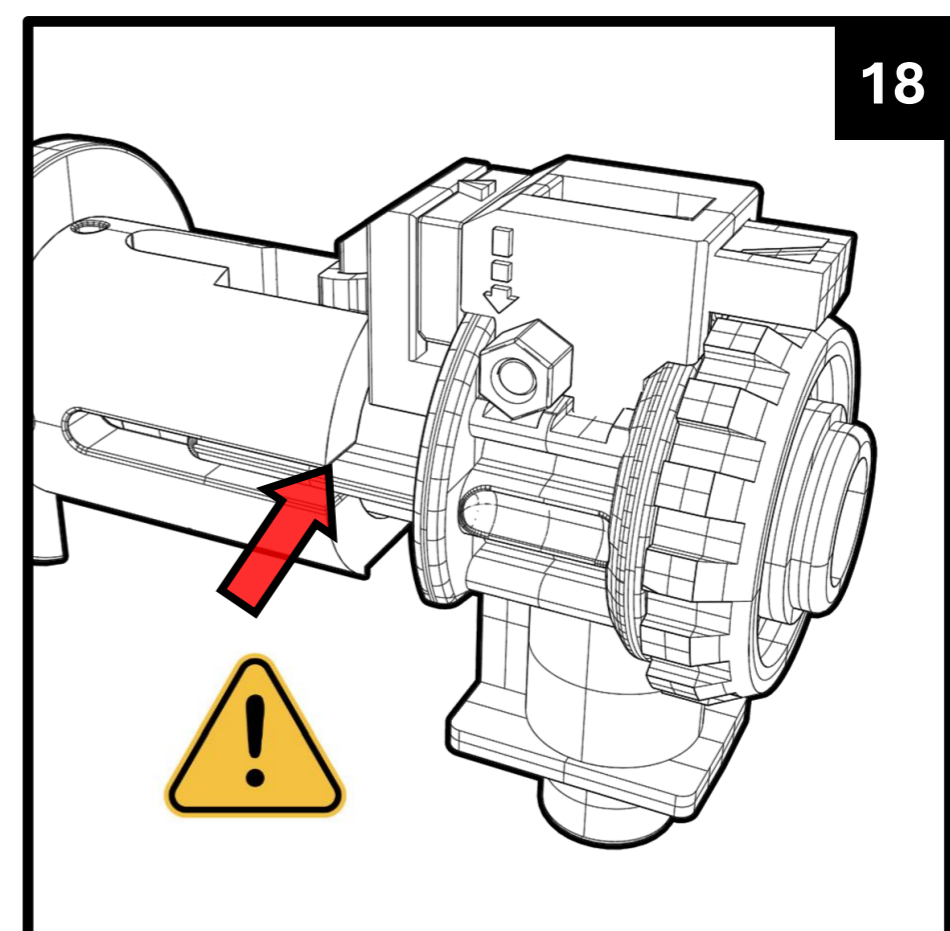
16. Once you have the outer barrel taken out the CM16 rifle, insert it through the inner barrel and onto the hop-up unit. In the next step you will see that it **wont fit!** **Modification will be required.**



17. As you can see from the demonstration looking at the right-side of the chamber. The hop-up unit cannot be installed back into the outer barrel now as the front bracket is now in the way preventing it from being slotted into the outer barrel. Parts of the outer barrel will need to be removed.

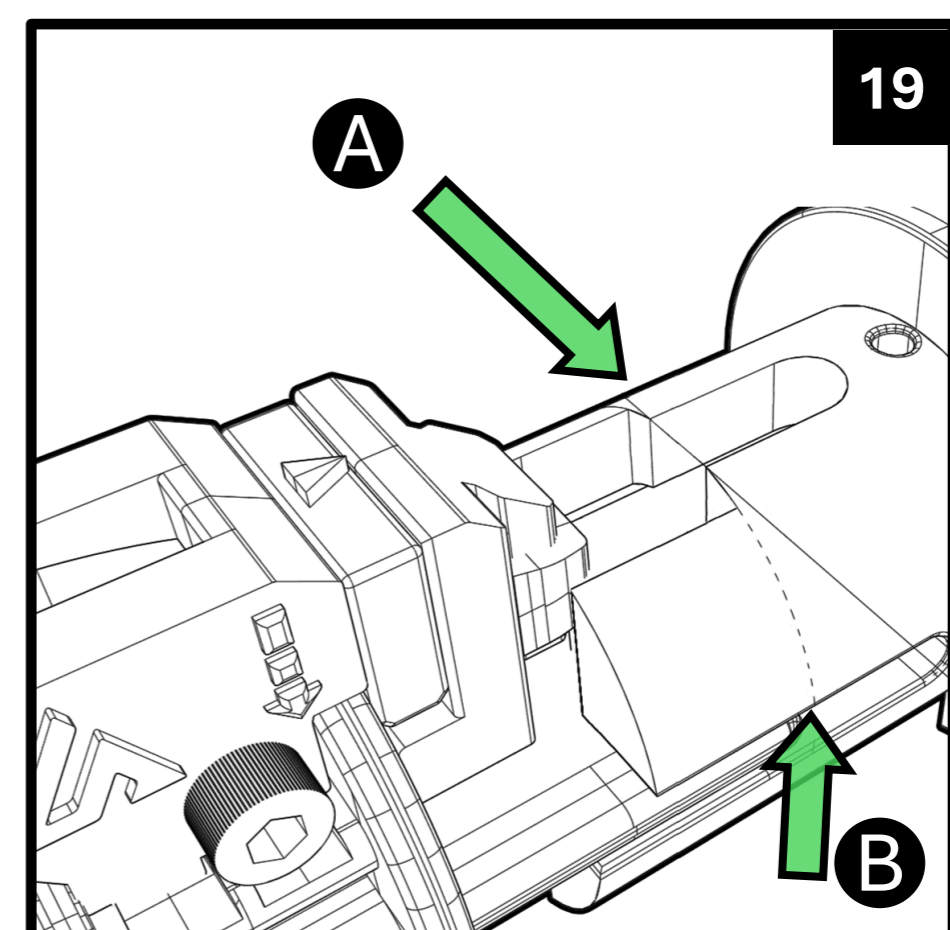


18. This step is look at blockage at the left side of the hop-up chamber.

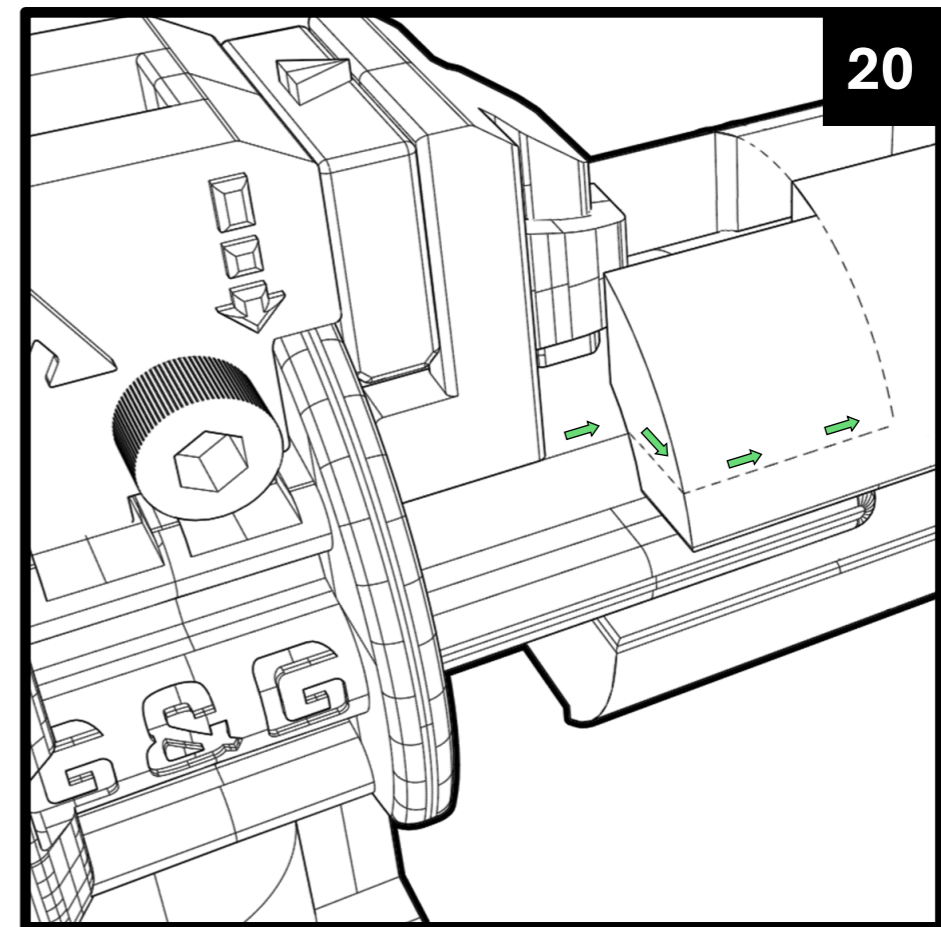


19. Take a pencil and see the demonstration pic. At the end cylindrical part of the outer barrel, draw a dotted line **(A)** around the outer barrel. (not that dotted line is completely perpendicular “imaginary line” **(B)** above the barrel).

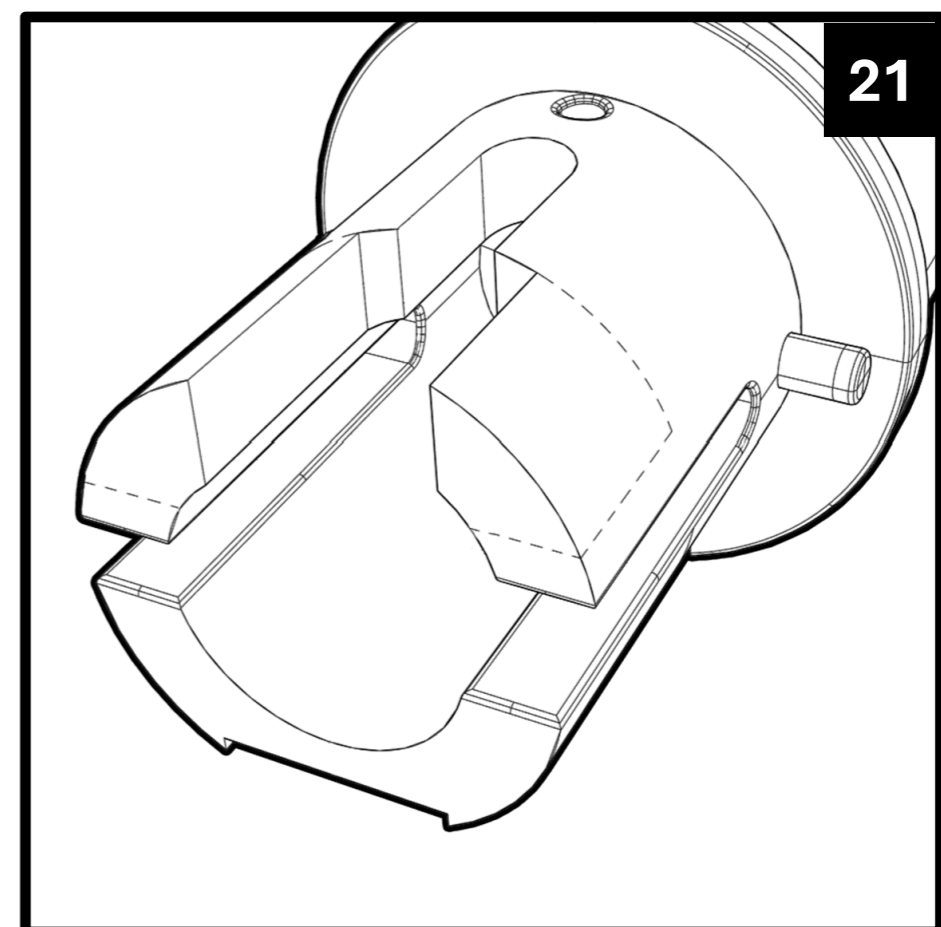
Do for the right and left side of the outer barrel.



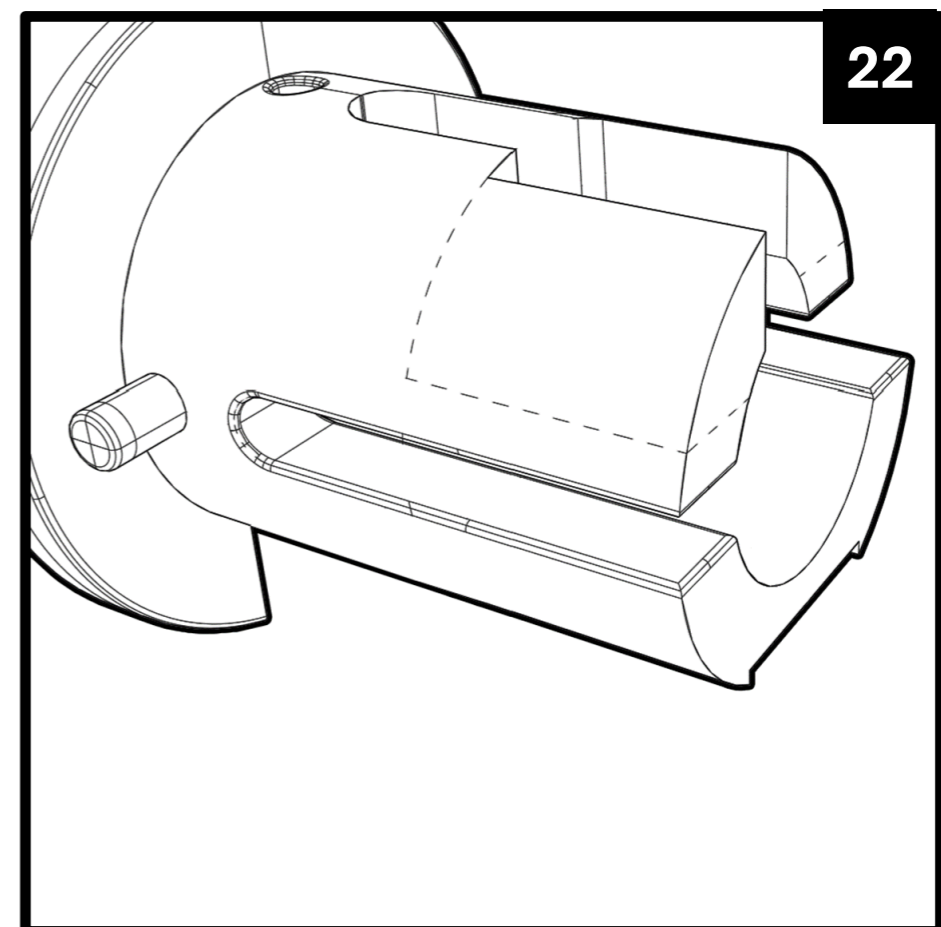
20. Making a clearance for the new TDC hop up unit. We want to create a line from approx. 1mm from the bottom of the front bracket to create a horizontal line. Place it on eye level and draw a horizontal dotted line across the outer barrel until the line meets the vertical dotted line from step 17.



21. Once all dotted lines are connected you will get something like this in the demonstration pic for the right side of the outer barrel. The part inside the dotted lines will need to be removed.

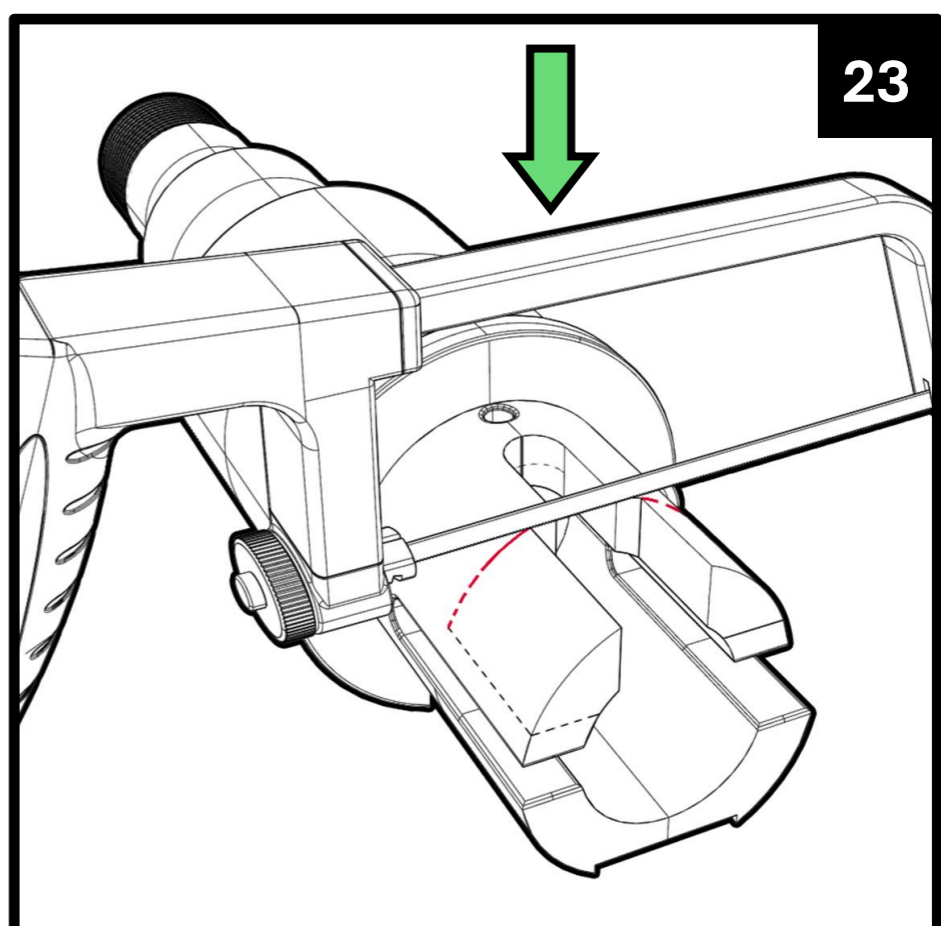


22. This is the what will look like for the left side of the outer barrel. The part inside the dotted lines will need to be removed.



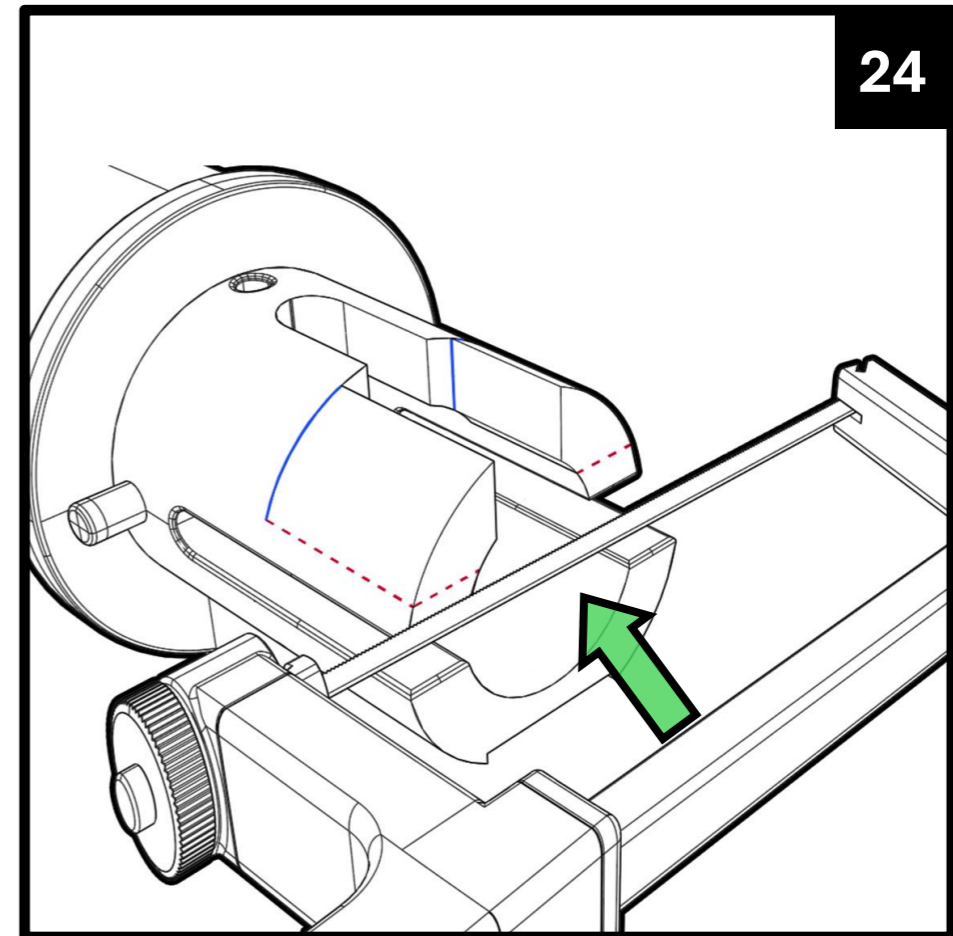
23. Cutting off the unwanted parts of the outer barrel.

Take a hacksaw and cut vertically downwards on the dotted lines (highlighted in red). This this part slow and make sure you don't past the end of the red dots. Stop cutting once you reach the horizontal intersection.

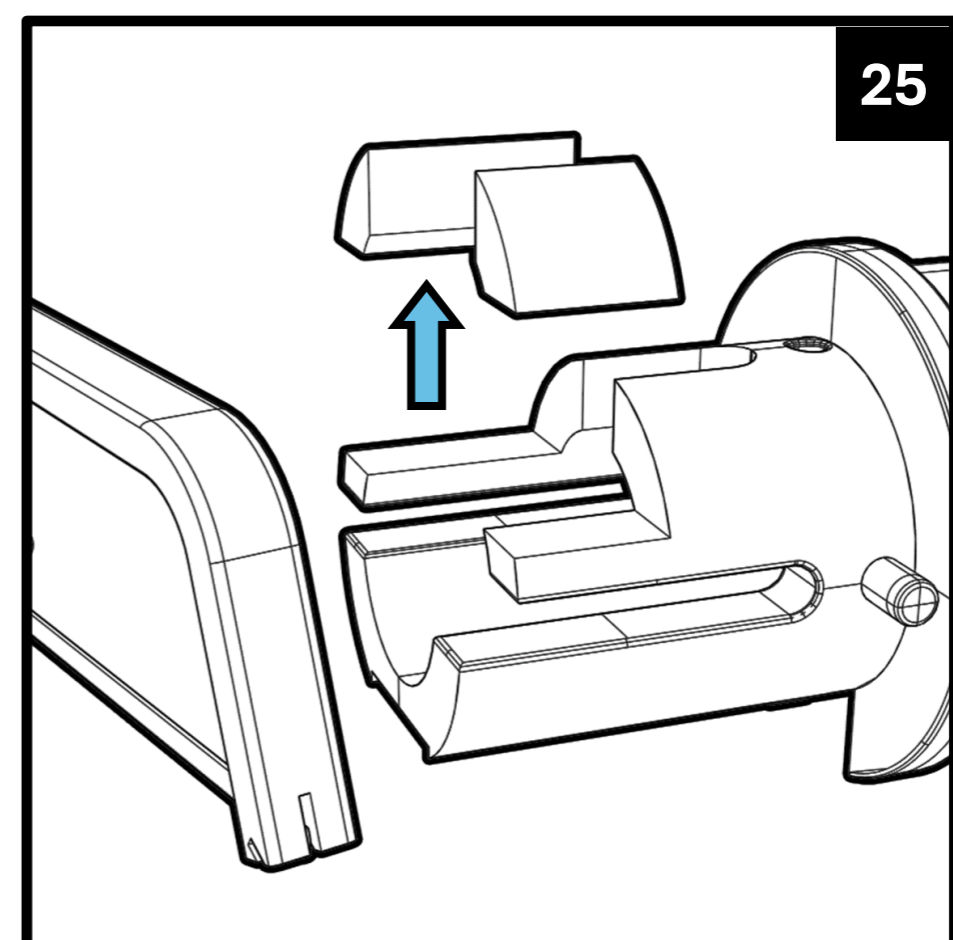


Step by Step Installation – Please Follow Each Step Precisely

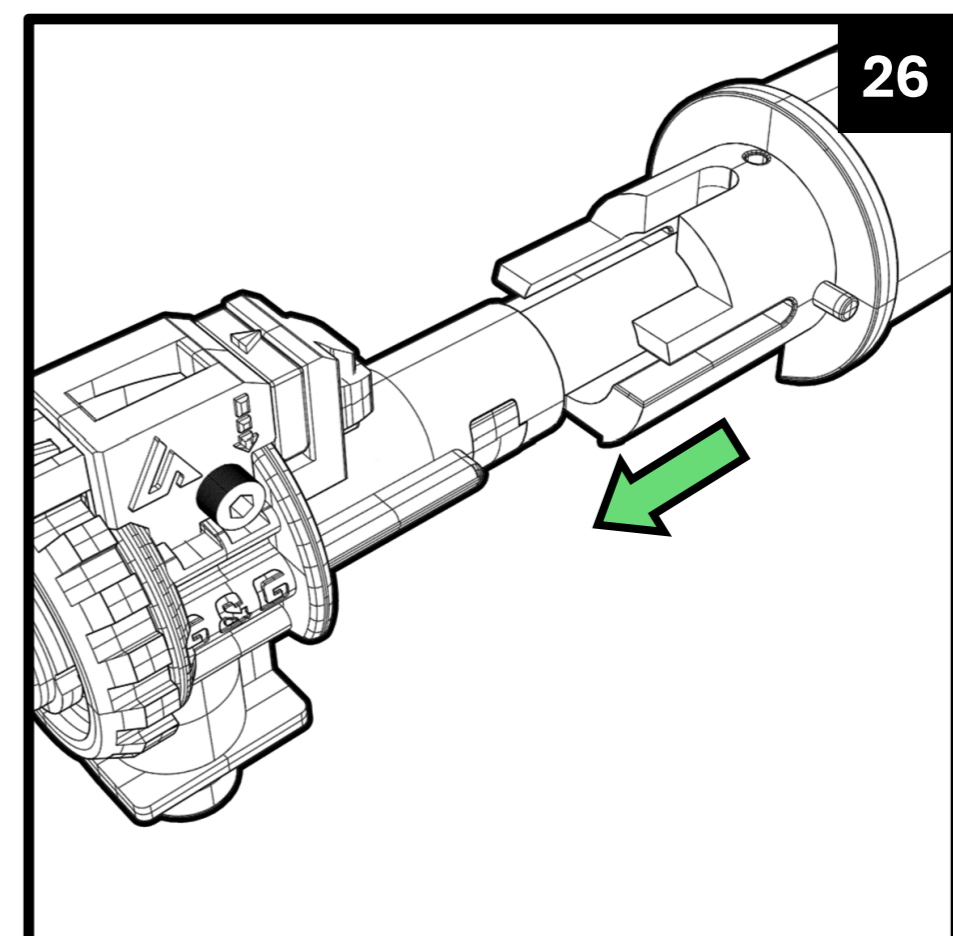
24. Next is the cut red dotted lines on the horizontal plane for the left and right side of the outer barrel. Hacksaw your way until you reach blue line which is the already cut line from step 23.



25. Once the dotted lines are cut, these two pieces of the outer barrel can be trashed. Sand out any burs or sharp edges from the outer barrel.

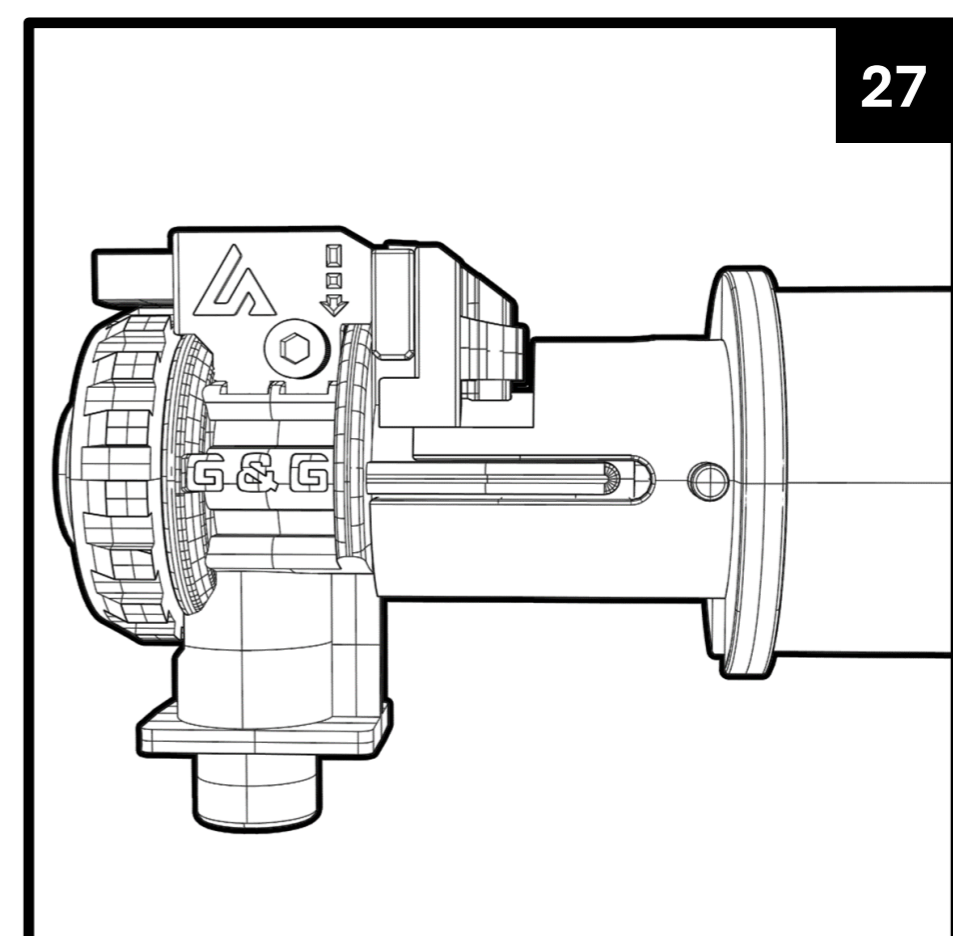


26. Combine the newly modified outer barrel with the G&G rotary hop-up chamber.

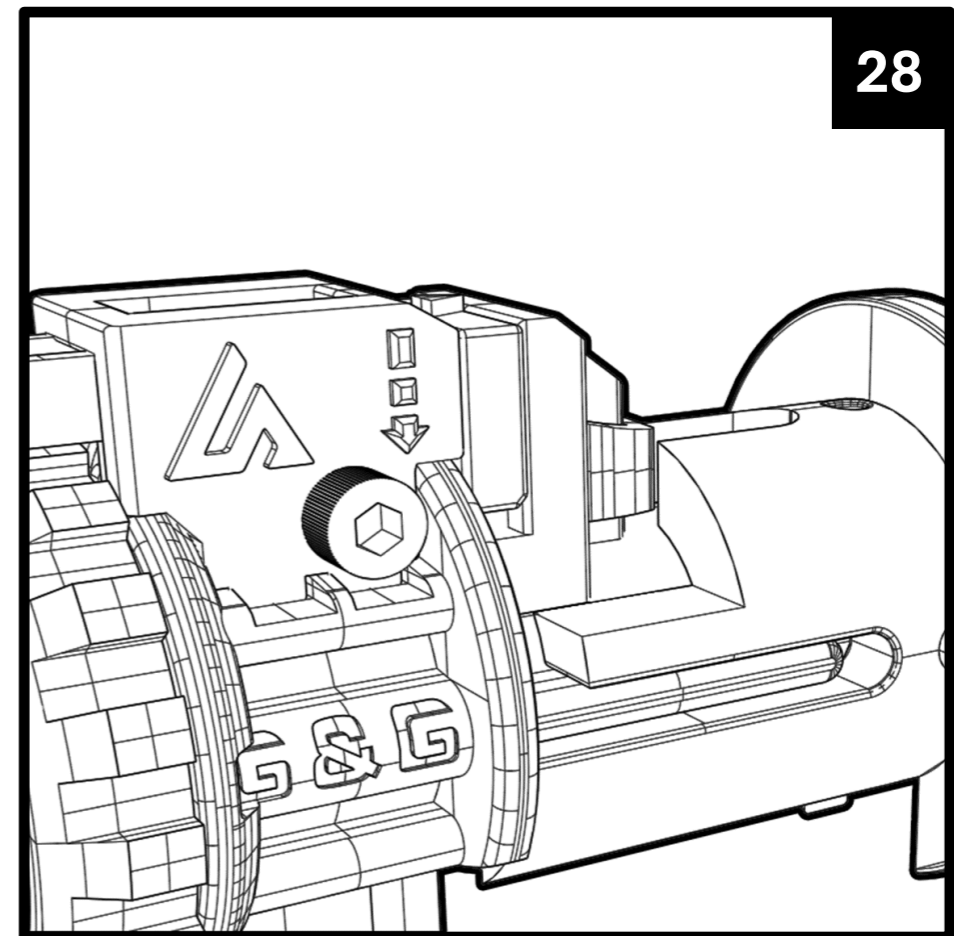


27. If don't correctly there will now be clearance on the outer barrel to make way for the upgraded G&G chamber.

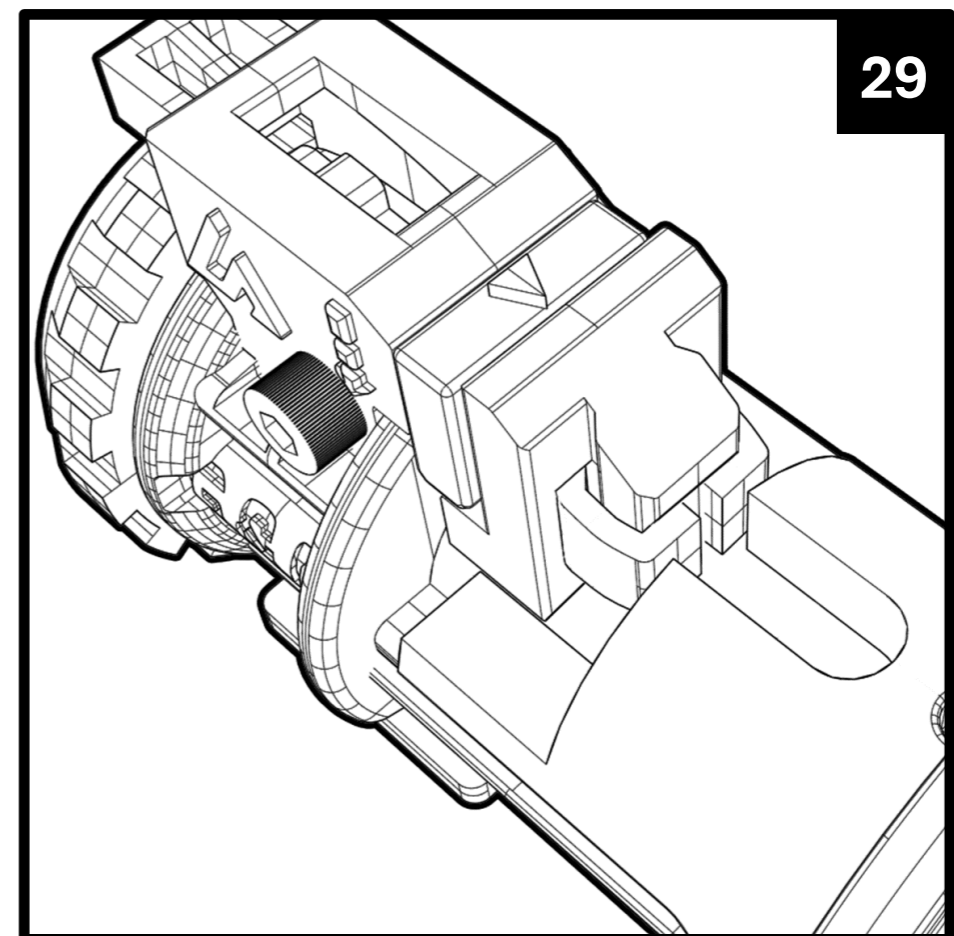
Once ready, remove the outer barrel to be installed back into the rest of the rifle and ready for whole CM16 rifle to be assembled back together again.



28. Alternative angle for demonstration purpose.



29. Alternative angle for demonstration purpose



Congrats on your installation! If you encounter any issues or get stuck during the install process. Check out our troubleshoot section on our website or contact our customer service team where a one of our tech team can assist you along the way.
info@airtechstudios.com